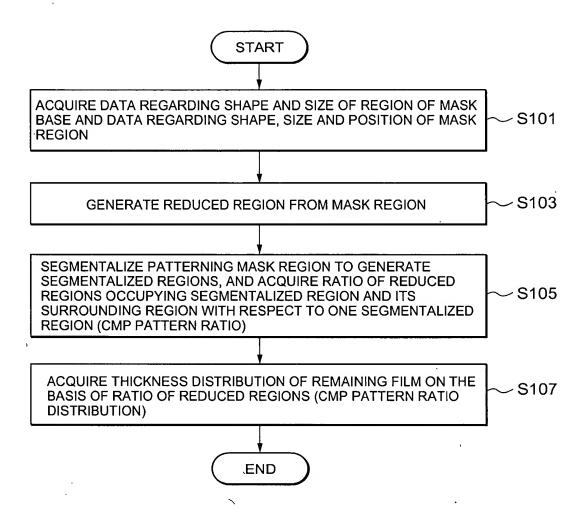
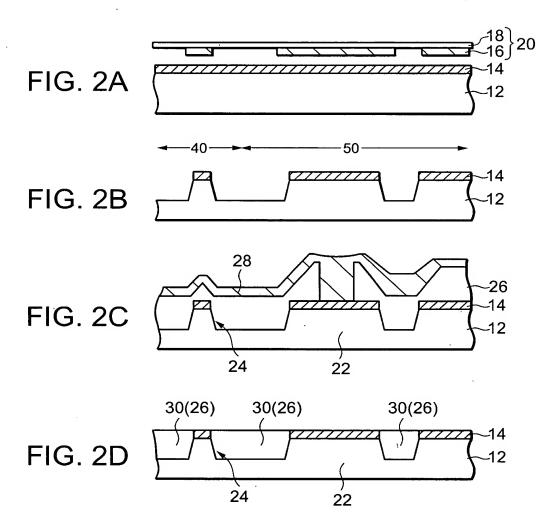
FIG. 1



FLOWCHART ILLUSTRATING FIRST METHOD FOR ESTIMATING REMAINING FILM THICKNESS



DIAGRAMS ILLUSTRATING FIRST METHOD FOR ESTIMATING REMAINING FILM THICKNESS

FIG. 3

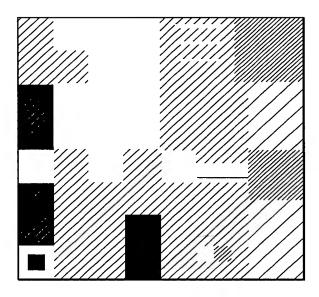


DIAGRAM ILLUSTRATING FIRST METHOD FOR ESTIMATING REMAINING FILM THICKNESS

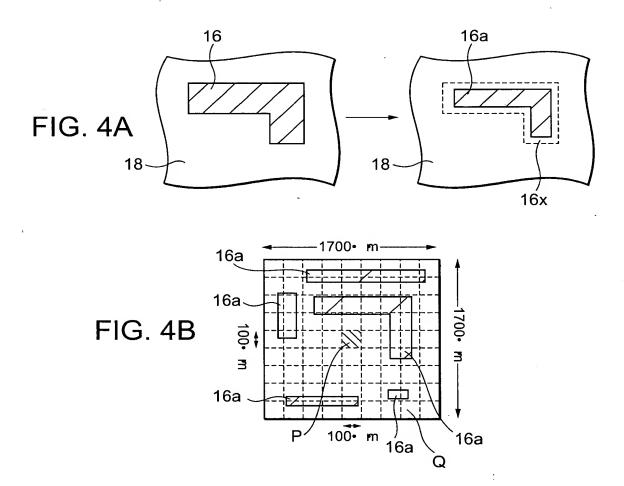


DIAGRAM ILLUSTRATING FIRST METHOD FOR ESTIMATING REMAINING FILM THICKNESS

FIG. 5

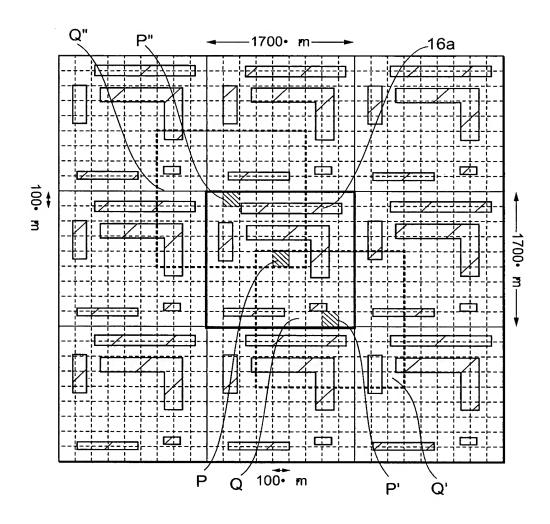


DIAGRAM ILLUSTRATING FIRST METHOD FOR ESTIMATING REMAINING FILM THICKNESS

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FIG. 6

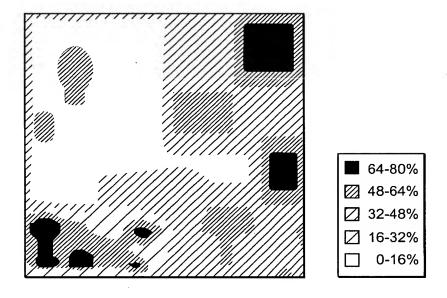
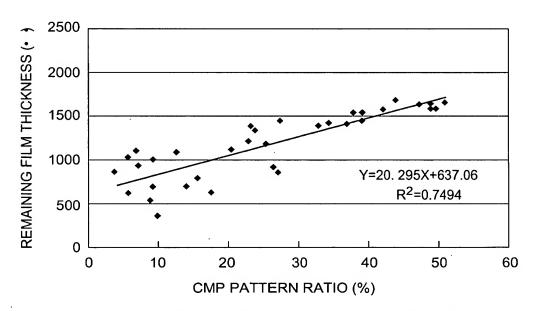


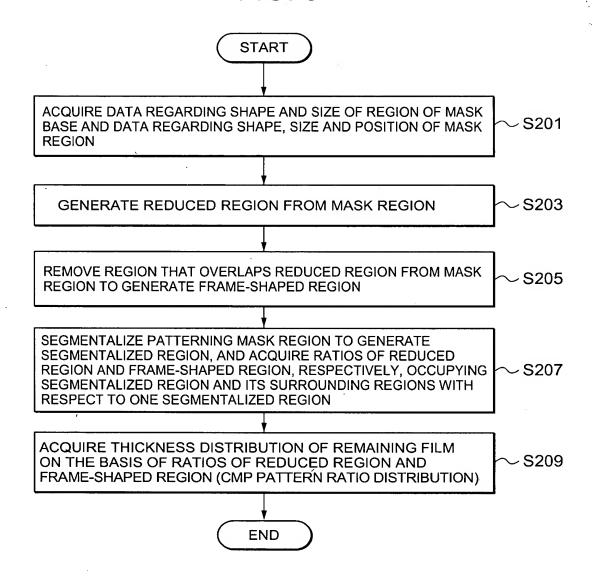
ILLUSTRATION OF FIRST METHOD FOR ESTIMATING REMAINING FILM THICKNESS (CMP PATTERN RATIO DISTRIBUTION)

FIG. 7



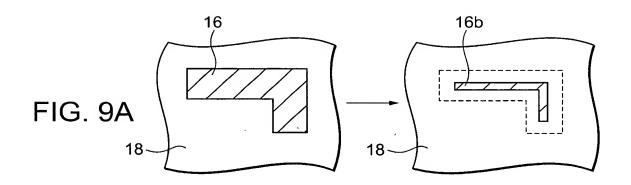
EVALUATION OF VALIDITY OF FIRST METHOD FOR ESTIMATING REMAINING FILM THICKNESS

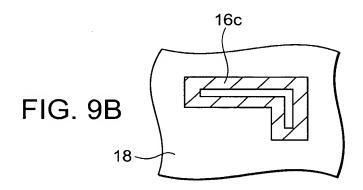
FIG. 8



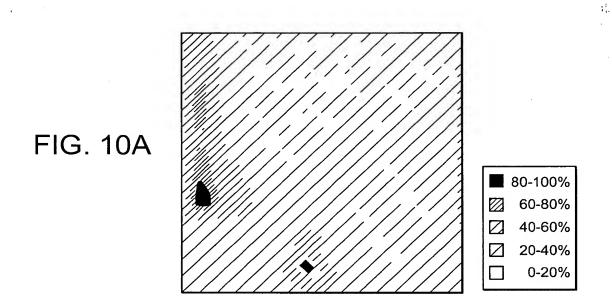
FLOWCHART ILLUSTRATING SECOND METHOD FOR ESTIMATING REMAINING FILM THICKNESS

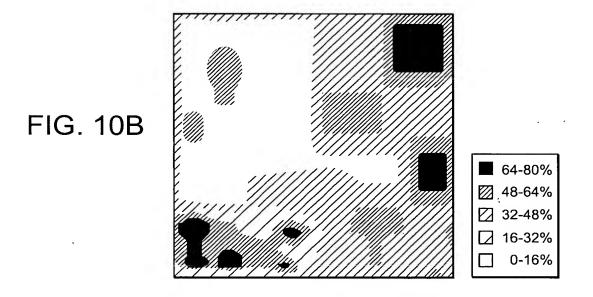
FIG. 9





DIAGRAMS ILLUSTRATING SECOND METHOD FOR ESTIMATING REMAINING FILM THICKNESS





DIAGRAMS ILLUSTRATING SECOND METHOD FOR ESTIMATING REMAINING FILM THICKNESS

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FIG. 11

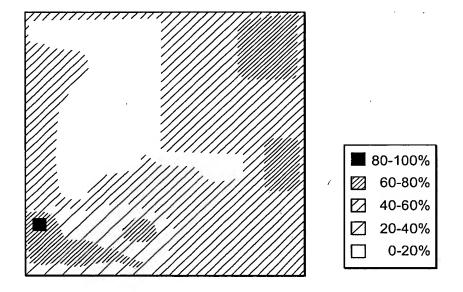
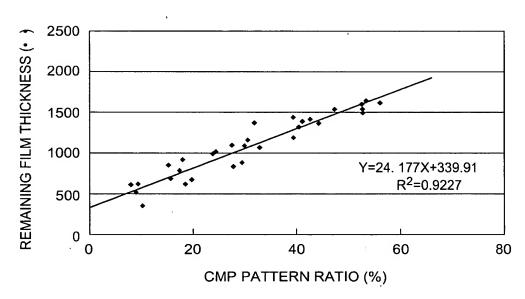


ILLUSTRATION OF SECOND METHOD FOR ESTIMATING REMAINING FILM THICKNESS (CMP PATTERN RATIO DISTRIBUTION)

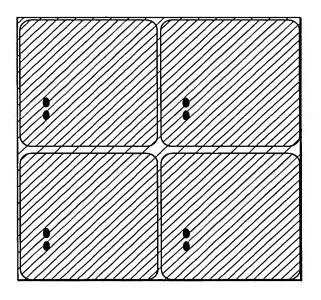
FIG. 12



EVALUATION OF VALIDITY OF SECOND METHOD FOR ESTIMATING REMAINING FILM THICKNESS

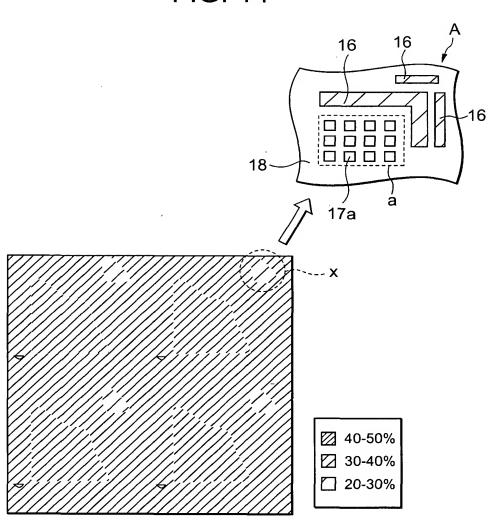
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FIG. 13



FIRST PATTERNING MASK DESIGN METHOD

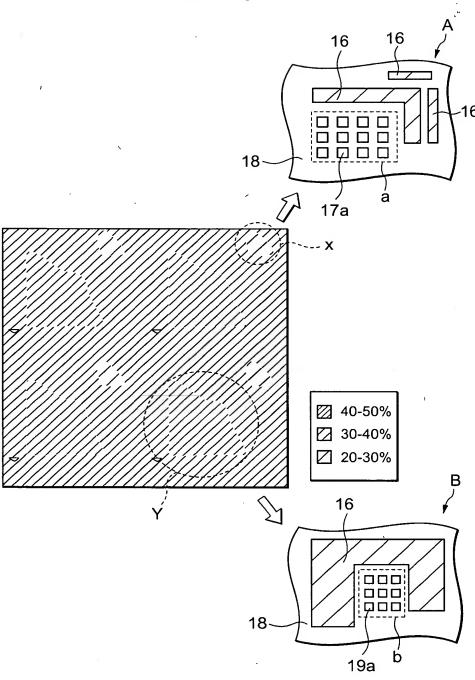
FIG. 14



FIRST PATTERNING MASK DESIGN METHOD

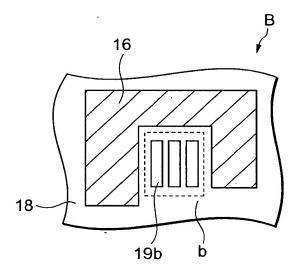
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FIG. 15



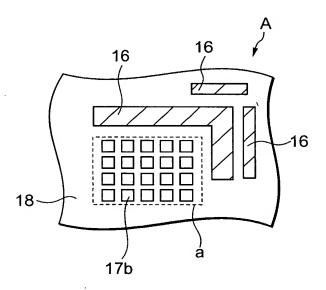
SECOND PATTERNING MASK DESIGN METHOD

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THIRD PATTERNING MASK DESIGN METHOD

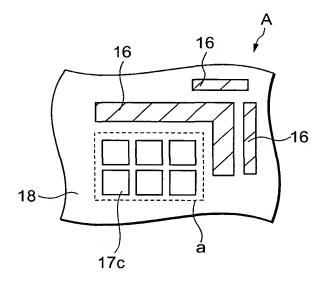
FIG. 17



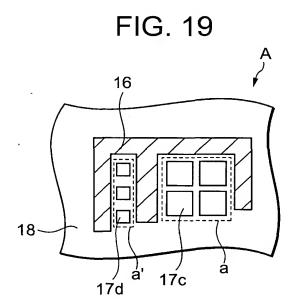
FOURTH PATTERNING MASK DESIGN METHOD

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FIG. 18



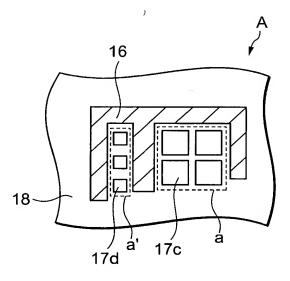
FIFTH PATTERNING MASK DESIGN METHOD

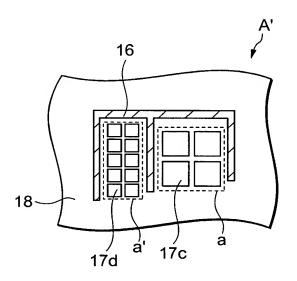


SIXTH PATTERNING MASK DESIGN METHOD

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SEVENTH PATTERNING MASK DESIGN METHOD